

1754

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

INFORMATION DISCLOSURE STATEMENT BY
APPLICANTS

Atty. Docket No. (Opt.)

FOC1100-1



Applicant

Robert Jackson

Application Number

10/038,745

Filed

January 2, 2002

For: **Method and System for On-Site Generation
and Distribution of a Process Gas**Certification Under 37 C.F.R. §1.8

I hereby certify that this document is being deposited with the United States Postal Service as First Class Mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22312-1450 on October 31, 2003.



Carolyn J. Williams

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

INFORMATION DISCLOSURE STATEMENT

Applicant respectfully requests, pursuant to 37 C.F.R. §§ 1.56, 1.97 and 1.98, that the art listed on the attached PTO/SB/08A and PTO/SB/08B forms be considered and cited in the examination of the above-identified application. A copy of the art is enclosed for the convenience of the Examiner.

Furthermore, pursuant to 37 C.F.R. §§ 1.97(g) and (h), no representation is made that a search has been made or that this art is material to patentability of the present application. Applicant respectfully submits that the claims of Applicant's above-referenced patent is patentably distinguishable from these references.

Applicant believes no fee is due at this time. However, the Commissioner is hereby authorized to charge any fees due, or refund any credit, to Deposit Account No. 50-0456 of Gray Cary Ware & Freidenrich LLP for any fee under 37 C.F.R. §1.17(i).

Respectfully submitted,

Gray Cary Ware & Freidenrich LLP
Attorneys for Applicant



George R. Meyer
Registration No. 35,284

Dated: 10/30, 2003

1221 South MoPac Expressway
Suite 400
Austin, TX 78746-6875
(512) 457-7093 - telephone
(512) 457-7001 - facsimile

INFORMATION DISCLOSURE STATEMENT BY APPLICANT <small>NOV 03 2003</small> <small>981</small> <small>PATENT & TRADEMARK OFFICE</small>		Application Number	10/038,745
		Filing Date	January 2, 2002
		First Named Inventor	Robert Jackson
		Group Art Unit	1754
		Examiner Name	Ngoc Nguyen
OF 1	Attorney Docket Number	FOC1100-1	

U.S. PATENT DOCUMENTS

Examiner Initials	Cite No.	Document Number		Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines Where Relevant Passages or Figures Appear
		Number	Kind Code (if known)			
A1	4,818,326			04/04/89	Liu, et al.	
A2	4,988,533			01/29/91	Freeman et al.	
A3	5,129,958			07/14/92	Nagashima et al.	
A4	5,425,842			06/20/95	Zijlstra	
A5	5,449,411			09/12/95	Fukuda et al.	
A6	5,620,526			04/15/97	Watatani et al.	
A7	5,679,215			10/21/97	Barnes, et al.	
A8	5,693,147			12/02/97	Ward, et al.	
A9	5,814,562			09/29/93	Green et al.	
A10	5,824,375			10/20/98	Gupta	
A11	5,824,607			10/20/98	Trow et al.	
A12	6,070,599			06/06/00	Ghanayem et al.	
A13	6,174,373	B1		01/10/01	Ghanayem et al.	
A14	6,286,451	B1		09/11/01	Ishikawa et al.	
A15	6,348,420	B1		02/19/02	Raaijmakers et al.	
A16	6,362,031	B1		03/26/02	Yamaguchi et al.	
A17	6,391,146	B1		05/21/02	Bhatnagar et al.	
A18	6,449,521	B1		09/10/02	Gupta	
A19	6,544,345	B1		04/08/03	Mayer et al.	
A20	6,544,900	B2		04/08/03	Raaijmakers et al.	
A21	6,569,257	B1		05/27/03	Nguyen et al.	
A22	6,599,574	B1		07/29/03	Yieh et al.	
A23	2003/0010354	A1		01/16/03	Goto et al.	
A24	2003/0049182	A1		03/13/03	Hertzler, et al.	



Examiner Initials	FOREIGN PATENT DOCUMENTS			Publication Date MM-DD-YYYY (Number 43)	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines Where Relevant Passages or Figures Appear
	No.	Country Code	Number	Kind Code (if known)		
	B1	WO	99/12196	A1	03/11/99	Applied Materials, Inc.
	B2	JP	08017804		01/19/96	Sony Corp.
	B3	EP	0 819 780	A2	01/21/98	Applied Materials, Inc.
Examiner Signature				Date Considered		

<p>FORM PTO 1449 US Department of Commerce Patent and Trademark Office NOV 03 2003</p>			Application Number	10/038,745																																																												
			Filing Date	January 2, 2002																																																												
			First Named Inventor	Robert Jackson																																																												
			Group Art Unit	1754																																																												
			Examiner Name	Ngoc Nguyen																																																												
Sheet 1 of 1	Atty Docket Number	FOC1100-1																																																														
<p>Examiner Initials: ADM Date: NOV 03 2003</p> <p>OTHER PRIOR ART -- NON PATENT LITERATURE DOCUMENTS</p> <table border="1"> <thead> <tr> <th></th> <th></th> <th></th> <th>Date</th> </tr> </thead> <tbody> <tr> <td>C1</td> <td>International Sematech, "Motorola Evaluation of the Applied Science and Technology, Inc. (ASTeX) Astron Technology for Perfluorocompound (PFC) Emissions Reductions on the Applied Materials DxL Chemical Vapor Deposition (CVD) Chamber."</td> <td colspan="2">April 16, 1999</td> </tr> <tr> <td>C2</td> <td>Sobolev, "Improvement of a Chemical Sensor for Detection of Hydrogen Fluoride in Gaseous Environment and a Fluoride Generator for its Calibration," http://www.tech-db.ru/istc/db/prn.nsf/we/1204, 4 pages.</td> <td colspan="2">March 2003</td> </tr> <tr> <td>C3</td> <td>Astron, "Reactive Gas Generators," MKS Instruments, Inc., 4 pages.</td> <td colspan="2"></td> </tr> <tr> <td>C4</td> <td>Chen, et al, "Advances in Remote Plasma Sources for Cleaning 300 mm and Flat Panel CVD Systems, Semiconductor Magazine."</td> <td colspan="2">August 2003</td> </tr> <tr> <td>C5</td> <td>Kranefuss, "Etching System," IBM Technical Disclosure Bulletin, Vol. 9, No. 8, pg. 2956.</td> <td colspan="2">January 1977</td> </tr> <tr> <td>C6</td> <td>"Anisotropic and Selective Etching of Tungsten Silicide-Tungsten-Tungsten Silicide Composite Stack," IBM Technical Disclosure Bulletin, Vol. 29, No. 3., pg. 1151.</td> <td colspan="2">August 1986</td> </tr> <tr> <td>C7</td> <td>Bergendahl, et al., "Positive Photoresist for Permeation Etching," IBM Technical Disclosure Bulletin, Vol. 23, No. 10, pg. 4446.</td> <td colspan="2">March 1981</td> </tr> <tr> <td>C8</td> <td>Flamm et al., "Reaction of Fluorine Atoms with SiO₂," J. Appl. Phys., 50 (10), pages 6211-3,</td> <td colspan="2">October 1980</td> </tr> <tr> <td>C9</td> <td>Donnelly et al., "Studies of Chemiluminescence Accompanying Fluorine Atom Etching of Silicon," J. Appl. Phys., 51 (10), pages 5273-6.</td> <td colspan="2">October 1980</td> </tr> <tr> <td>C10</td> <td>Flamm et al., "The Reaction of Fluorine Atoms with Silicon," J. Appl. Phys., 52 (5), pages 3633-9.</td> <td colspan="2">May 1981</td> </tr> <tr> <td>C11</td> <td>Mucha et al., "Chemiluminescence and the Reaction of Molecular Fluorine with Silicon," J. Phys. Chem., Vol. 85, Pages 3529-3532.</td> <td colspan="2">1981</td> </tr> <tr> <td>C12</td> <td>Mucha et al., "Chemiluminescent Reaction of SiF₂ with Fluorine and the Etching of Silicon by Atomic and Molecular Fluorine," (6), Pages 4553-4, J. Appl. Phys., 53(6).</td> <td colspan="2">June 1982</td> </tr> <tr> <td>C13</td> <td>Flamm et al., "XeF₂ and F-atom Reactions with Si: Their Significance for Plasma Etching," Solid State Technology, Pages 117-121.</td> <td colspan="2">April 1983</td> </tr> <tr> <td>C14</td> <td>Merriam-Webster's Collegiate Dictionary, Tenth Edition, page 746.</td> <td colspan="2"></td> </tr> </tbody> </table>								Date	C1	International Sematech, "Motorola Evaluation of the Applied Science and Technology, Inc. (ASTeX) Astron Technology for Perfluorocompound (PFC) Emissions Reductions on the Applied Materials DxL Chemical Vapor Deposition (CVD) Chamber."	April 16, 1999		C2	Sobolev, "Improvement of a Chemical Sensor for Detection of Hydrogen Fluoride in Gaseous Environment and a Fluoride Generator for its Calibration," http://www.tech-db.ru/istc/db/prn.nsf/we/1204 , 4 pages.	March 2003		C3	Astron, "Reactive Gas Generators," MKS Instruments, Inc., 4 pages.			C4	Chen, et al, "Advances in Remote Plasma Sources for Cleaning 300 mm and Flat Panel CVD Systems, Semiconductor Magazine."	August 2003		C5	Kranefuss, "Etching System," IBM Technical Disclosure Bulletin, Vol. 9, No. 8, pg. 2956.	January 1977		C6	"Anisotropic and Selective Etching of Tungsten Silicide-Tungsten-Tungsten Silicide Composite Stack," IBM Technical Disclosure Bulletin, Vol. 29, No. 3., pg. 1151.	August 1986		C7	Bergendahl, et al., "Positive Photoresist for Permeation Etching," IBM Technical Disclosure Bulletin, Vol. 23, No. 10, pg. 4446.	March 1981		C8	Flamm et al., "Reaction of Fluorine Atoms with SiO ₂ ," J. Appl. Phys., 50 (10), pages 6211-3,	October 1980		C9	Donnelly et al., "Studies of Chemiluminescence Accompanying Fluorine Atom Etching of Silicon," J. Appl. Phys., 51 (10), pages 5273-6.	October 1980		C10	Flamm et al., "The Reaction of Fluorine Atoms with Silicon," J. Appl. Phys., 52 (5), pages 3633-9.	May 1981		C11	Mucha et al., "Chemiluminescence and the Reaction of Molecular Fluorine with Silicon," J. Phys. Chem., Vol. 85, Pages 3529-3532.	1981		C12	Mucha et al., "Chemiluminescent Reaction of SiF ₂ with Fluorine and the Etching of Silicon by Atomic and Molecular Fluorine," (6), Pages 4553-4, J. Appl. Phys., 53(6).	June 1982		C13	Flamm et al., "XeF ₂ and F-atom Reactions with Si: Their Significance for Plasma Etching," Solid State Technology, Pages 117-121.	April 1983		C14	Merriam-Webster's Collegiate Dictionary, Tenth Edition, page 746.		
			Date																																																													
C1	International Sematech, "Motorola Evaluation of the Applied Science and Technology, Inc. (ASTeX) Astron Technology for Perfluorocompound (PFC) Emissions Reductions on the Applied Materials DxL Chemical Vapor Deposition (CVD) Chamber."	April 16, 1999																																																														
C2	Sobolev, "Improvement of a Chemical Sensor for Detection of Hydrogen Fluoride in Gaseous Environment and a Fluoride Generator for its Calibration," http://www.tech-db.ru/istc/db/prn.nsf/we/1204 , 4 pages.	March 2003																																																														
C3	Astron, "Reactive Gas Generators," MKS Instruments, Inc., 4 pages.																																																															
C4	Chen, et al, "Advances in Remote Plasma Sources for Cleaning 300 mm and Flat Panel CVD Systems, Semiconductor Magazine."	August 2003																																																														
C5	Kranefuss, "Etching System," IBM Technical Disclosure Bulletin, Vol. 9, No. 8, pg. 2956.	January 1977																																																														
C6	"Anisotropic and Selective Etching of Tungsten Silicide-Tungsten-Tungsten Silicide Composite Stack," IBM Technical Disclosure Bulletin, Vol. 29, No. 3., pg. 1151.	August 1986																																																														
C7	Bergendahl, et al., "Positive Photoresist for Permeation Etching," IBM Technical Disclosure Bulletin, Vol. 23, No. 10, pg. 4446.	March 1981																																																														
C8	Flamm et al., "Reaction of Fluorine Atoms with SiO ₂ ," J. Appl. Phys., 50 (10), pages 6211-3,	October 1980																																																														
C9	Donnelly et al., "Studies of Chemiluminescence Accompanying Fluorine Atom Etching of Silicon," J. Appl. Phys., 51 (10), pages 5273-6.	October 1980																																																														
C10	Flamm et al., "The Reaction of Fluorine Atoms with Silicon," J. Appl. Phys., 52 (5), pages 3633-9.	May 1981																																																														
C11	Mucha et al., "Chemiluminescence and the Reaction of Molecular Fluorine with Silicon," J. Phys. Chem., Vol. 85, Pages 3529-3532.	1981																																																														
C12	Mucha et al., "Chemiluminescent Reaction of SiF ₂ with Fluorine and the Etching of Silicon by Atomic and Molecular Fluorine," (6), Pages 4553-4, J. Appl. Phys., 53(6).	June 1982																																																														
C13	Flamm et al., "XeF ₂ and F-atom Reactions with Si: Their Significance for Plasma Etching," Solid State Technology, Pages 117-121.	April 1983																																																														
C14	Merriam-Webster's Collegiate Dictionary, Tenth Edition, page 746.																																																															